## I. AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An apparatus for manufacturing a glass base material and maintaining the purity of a raw material which is a parent material of an optical fiber, comprising:

a tank which contains a raw material of a glass base material to vaporize said raw material and generate the raw material in the gas phase;

a temperature control unit which controls a temperature of said raw material to be constant; and

a pressure control unit completely independent with said temperature control unit, wherein said pressure control unit ~~which~~ controls a pressure of said raw material in the gas phase to be constant.

2. (Previously Amended) An apparatus as claimed in claim 1, wherein said tank includes:

a gas phase region which contains said raw material in the gas phase; and

a liquid phase region which contains said raw material in the liquid phase.

3. (Previously Amended) An apparatus as claimed in claim 2, wherein said temperature control unit and said pressure control unit control a partial pressure of said raw material in said gas phase region by controlling an equilibrium vapor pressure in said gas phase region and said liquid phase region.

4. (Original) An apparatus as claimed in claim 3, wherein said pressure control unit has a carrier gas supply unit, which supplies a carrier gas for controlling said equilibrium vapor pressure, by bubbling said carrier gas through said liquid phase region.

5. (Original) An apparatus as claimed in claim 4, wherein said carrier gas supply unit has a carrier gas cylinder which supplies said carrier gas to said carrier gas supply unit.

6. (Original) An apparatus as claimed in claim 1, further comprising at least one reaction vessel where said raw material in gas phase is supplied and said glass base material is formed by hydrolyzing said raw material in gas-phase.

7. (Previously Amended) An apparatus as claimed in claim 6, further comprising a gas material supply valve that controls a flow rate of said raw material in gas phase from said tank to said reaction vessel.

8. (Currently Amended) An apparatus as claimed in claim 6, further comprising a filter provided between said tank and said gas material supply valve that filters said raw material in the gas phase supplied to said reaction vessel through said gas material supply valve, in order to prevent clogs from being generated in the gas material supply valve.

9. (Original) An apparatus as claimed in claim 8, wherein said filler is formed by a membrane that has a transmitting hole for filtering said raw material in gas phase.

10. (Original) An apparatus as claimed in claim 9, wherein a diameter of said transmitting hole is substantially from 0.1 μm to 100 μm.

11. (Original) An apparatus as claimed in claim 9, wherein said membrane is made of a politetrafluoroethylene.

12. (Original) An apparatus as claimed in claim 9, wherein said membrane is made of a stainless sinter.

13. (Original) An apparatus as claimed in claim 9, wherein said membrane is made of a stainless fiber.

14. (Original) An apparatus as claimed in claim 9, wherein said membrane is made of a ceramic fiber.

15. (Original) An apparatus as claimed in claim 9, wherein said filter has a plurality of layers of said membranes.

16. (Original) An apparatus as claimed in claim 6, wherein said reaction vessel has a cooling unit which cools said reaction vessel, and said cooling unit circulates cooling water which contains an anticorrosive chemical inside said cooling unit.

17. (Original) An apparatus as claimed in claim 16, wherein said anticorrosive chemical includes policarboxylic acid nitrite.

18. (Original) An apparatus as claimed in claim 17, wherein said cooling water contains said policarboxylic acid nitrite at a concentration from 1 ppm to 10 ppm.

19. (Original) An apparatus as claimed in claim 15, wherein said anticorrosive chemical further includes inorganic nitride.

20. (Original) An apparatus as claimed in claim 19, wherein said cooling water contains each of said policarboxylic acid nitrite and inorganic nitride at a concentration from 1 ppm to 10 ppm.

21. (Original) An apparatus as claimed in claim 16, wherein a temperature of said cooling water is substantially from 40°C to 90°C.

22. (Original) An apparatus as claimed in claim 21, wherein said temperature of said cooling water is substantially from 50°C to 80°C.

23. (Original) An apparatus as claimed in claim 16, wherein said cooling water contains an antiblastic agent that suppresses an increase of bacteria.

24. (Currently Amended) A method for manufacturing a glass base material and maintaining the purity of a raw material, comprising:

providing a raw material of said glass base material,

heating said raw material to vaporize said raw material and generate a raw material in the gas phase,

supplying a carrier gas to reduce the partial pressure of said raw material in the gas phase to vaporize said raw material,

controlling a temperature of said raw material to be constant by adjusting said heating of said raw material, and

controlling said partial pressure of said raw material to be constant completely separated with said control of said temperature by adjusting said supply of said carrier gas.

25. (Original) A method as claimed in claim 24, further comprising; supplying and hydrolyzing said raw material in gas phase to form said glass base material.

26. (Previously Amended) A method as claimed in claim 25, further comprising; filtering said raw material in the gas phase and supplying and hydrolyzing the filtered raw material in the gas phase.

27. (Previously Amended) A method as claimed in claim 25, further comprising; controlling a flow rate of said raw material in the gas phase and supplying and hydrolyzing said flow rate controlled raw material in the gas phase.

28. (Previously Amended) A method as claimed in claim 25, wherein said supplying and hydrolyzing of said raw material occurs in a reaction vessel; and

said hydrolyzing includes cooling said reaction vessel by circulating cooling water around said reaction vessel.

29. (Previously Amended) A method as claimed in claim 28, wherein said cooling water contains anticorrosive chemicals.

30. (Original) A method as claimed in claim 29, wherein said anticorrosive chemicals include policarboxylic acid nitrite.

31. (Original) A method as claimed in claim 30, wherein said cooling water contains said policarboxylic acid nitrite at a concentration substantially from 1 ppm to 10 ppm.

32. (Original) A method as claimed in claim 29, wherein said anticorrosive chemical further includes inorganic nitride.

33. (Previously Amended) A method as claimed in claim 32, wherein said cooling water contains inorganic nitride at a concentration substantially from 1 ppm to 10 ppm.

34. (Original) A method as claimed in claim 29, wherein said cooling regulates a temperature of said cooling water substantially from 40°C to 90°C.

35. (Original) A method as claimed in claim 34, wherein said cooling regulates said temperature of said cooling water substantially from 50°C to 80°C.

36. (Original) A method as claimed in claim 29, wherein said cooling water contains an antiblastic agent that suppresses an increase of bacteria in said cooling water.